



NOvA Working Group Meeting

December 06, 2006

2:00 – 4:00 PM

Snake Pit

Agenda

- 1) Feedback on interchanges between the Directorate/Project and OHEP [Hugh Montgomery/John Cooper/ Mike Procario]
 - a) Progress on approach to acquiring the conventional facilities [Mike Procario/Steve Webster]
- 2) NOvA Progress Report and Status on Preparation of Project Documents [John Cooper/Ron Ray]
 - a) Status of Acquiring Additional Project Personnel. [John Cooper/Jim Strait]
 - b) Status on NOvA's EA/ES&H Action Plan and Timeline [Keith Schuh]
- 3) Preparations for Director's 2/3a Review of NOvA – Jan. 30 – Feb. 1. 2007 [Dean Hoffer]
 - a) Reviewers
 - b) Draft Charge
 - c) Preparing Draft Agenda
 - d) OPMO Review Webpage
 - e) Preps for EIR
- 4) Review NOvA Timeline [Dean Hoffer]
- 5) Status of Action Items [John Cooper]

Reviewer Committee for CD-2/3a

Director's Review

- Ken Domann
- Dmitri Denisov
- Erik Gottschalk
- Karen Hellman
- Dean Hoffer
- Pat Hurh
- Joe Ingraffia
- Jonathan Lewis
- Michael Lindgren
- Elaine McCluskey
- Heidi Schellman
- Jeff Sims
- Linda Stutte
- Rich Stanek
- Ed Temple

Draft Review Charge

This charge is for the Committee to conduct a Director's CD-2/3a Review of the proposed NOvA project at Fermilab. The review is to assure that all the requirements have been met for DOE to approve CD-2/3a. The DOE CD-2/3a review is currently schedule for March 6-8, 2007.

CD-2 is approval of the Performance Baseline. The Performance Baseline is developed based on a mature design (Preliminary Design or a Technical Design Report), a well-defined and documented scope, a resource-loaded detailed schedule, a definitive cost estimate, defined Key Performance Parameters and some additional project management documents. Approval of CD-2 authorizes submission of a budget request for the Total Project Cost (TPC).

CD-3a is approval to start limited Construction. NOvA is requesting CD-3a for infrastructure and site preparation work to support the start of building construction. The design and engineering is to be essentially complete, a final design review performed, all environmental and safety criteria met, and all security concerns addressed, the project is ready to begin construction, implementation, procurement, or fabrication. DOE approval of CD-3a provides authorization to complete procurement and construction of the specified work.

Draft Review Charge (continued)

The technical part of the review will focus on the technical designs for the Detector and Building. It will answer the questions, will these designs meet the technical specifications and are the designs sound. The cost and schedule baselines are based on a detailed WBS – Work Breakdown Structure, WBS Dictionary, BOE – Basis of Estimate documentation, risk and contingency analyses, RLS – Resource Loaded Schedule, and time phased funding and cost profiles. The committee is asked to review each of these items, for quality, completeness, and accuracy. Furthermore, the committee is asked to review and assess the quality of and comment on the additional formal project management documentation required for CD-2/3a approval.

DOE's guidance to NOvA is not to exceed \$200M for the sum of the MIE Base + MIE Contingency + Cooperative Agreement Building Construction Base + Cooperative Agreement Building Construction Contingency. Based on the scope of work presented during the review, the committee is to assess if the project can be built per the guidance. If it is determined that the work scope as presently defined cannot be completed per the guidance, then the committee should recommend the Far Detector mass that could be built within the guidance.

Draft Review Charge (continued)

As part of this assessment the questions listed in Attachment 1 of this charge should be addressed. Additionally the review committee is to review and comment on the Project's response and actions taken on the recommendations from the Director's CD-1 Review of NOvA on February 28 - March 2, 2006 and from the DOE CD-1 Review conducted April 4-6, 2006. Constructive comments on presentation content, format, and style are also requested.

Finally, the committee should present findings, comments, and conclusions at a closeout meeting with NOvA's and Fermilab's management and provide a written report soon after the review.

Att. 1 of the Draft Charge

Technical

- Are the technical specifications clearly stated and documented?
- Can the design be built? Does the design meet the technical specifications? Is it a reasonable design?
- Does the baseline design meet the project's objectives (mission need)?

Cost

- Is the Work Breakdown Structure (WBS) appropriate for the project scope?
- Do the cost estimates for each WBS (or cost) element have a sound documented basis and are they reasonable?
- Does an obligation profile exist and is it within the funding guidance profile?

Att. 1 of the Draft Charge (continued)

Schedule

- Is the schedule well developed and appropriately structured by specifying relationships, predecessors, successors, critical path, resource loaded, etc?
- Are the durations for the activities and overall schedule reasonable and achievable with the assumed resources?
- Does the schedule contain appropriate levels of milestones, sufficient quantity of milestones for tracking progress and do they appear to be achievable?
- Does the schedule include activities for design reviews, which include assessment of the designs readiness for procuring prototypes, preproduction and production materials?

Management

- Is there an appropriate management organizational structure in place to accomplish the design and construction?
- Is the organization structure well documented, responsibilities defined and appropriate for the scope of work?
- Are there adequate staffing resources available or planned for this effort?
- Is there a funding plan available or proposed to meet the resource requirements to realize the project?
- Has a Risk Plan been developed, risks identified, risks analyzed, risk responses planned/implemented, risk monitoring/control process established and do they seem appropriate?

Att. 1 of the Draft Charge (continued)

Procurement

- Have the critical procurements been identified and are they included in the schedule with adequate lead time built in?
- Have critical make vs. buy decisions been evaluated in conjunction with the scope and is that reflected in the baseline cost estimate, schedule and technical risk plan?
- Are the designs final and procurement packages prepared to the degree appropriate to initiate construction as scheduled for infrastructure and site preparation work to support the start of building construction?

Draft Agenda

Tuesday, Jan. 30

8:00 – 8:45 AM	45	Executive Session (Comitium, WH2SE)	Ed Temple
9:00 – 9:10 AM	10	Introduction (1 West for all Talks)	Hugh Montgomery
9:10 – 9:25 AM	15	Scientific Performance Requirements	Mark Messier or Gary
9:25 – 10:10 AM	45	Project Overview	John Cooper
10:10 – 10:40 AM	30	Project Cost Drivers	Ron Ray, Bob Cibic
10:40 – 10:55 AM	15	BREAK	
10:55 – 11:20 AM	25	Site and Building	Steve Dixon
11:20 – 11:50 AM	30	Scintillator	Stuart Mufson
11:50 – 12:05 PM	15	Fiber	Carl Bromberg
12:05 – 1:05 PM	60	LUNCH (WH2 Crossover)	
1:05 – 1:25 PM	20	PVC and Extrusions	Rich Talaga
1:25 – 1:55 PM	30	Extrusion Modules	Ken Heller
1:55 – 2:25 PM	30	Electronics and DAQ	Leon Mualem
2:25 – 2:55 PM	30	Near/Far Detector Assembly may need to split	Dave Ayres
2:55 – 3:10 PM	15	Then Year Costs and NOvA Cost Range	John Cooper
3:10 – 3:25 PM	15	BREAK	

Draft Agenda (continued)

- 3:25 – 4:25 PM 60 BREAKOUT SESSIONS better follow
Danny's scheme?
- 1) Site and Building (Blackhole – WH2NW)
 - 2) Commodities - Scintillator, Fiber, PVC (1 North, WH1NW)
 - 3) Extrusion Module Production (Snakepit, WH2NE)
 - 4) Electronics and DAQ (Racetrack, WH7X)
 - 5) Far and Near Detector Assembly (1 East, WH1NE)
- 4:30 – 6:30 PM Executive Session (Comitium, WH2SE)

Draft Agenda (continued)

Wednesday, Jan. 31

8:00 – 8:30 AM

Cost and Schedule Executive Session
(Comitium, WH2SE)

Ed Temple

8:30 – 10:30 AM

BREAKOUT SESSIONS

1) Site and Building (Blackhole –
WH2NW)

2) Commodities - Scintillator, Fiber,
PVC (1 North, WH1NW)

3) Extrusion Module Production
(Snakepit, WH2NE)

4) Electronics and DAQ (Racetrack,
WH7X)

5) Far and Near Detector Assembly (1
East, WH1NE)

6) Management, Cost and Schedule
(Comitium, WH2SE)

Draft Agenda (continued)

10:30 – 10:45 AM	BREAK (Outside Comitium, WH2SE)
10:45 – 12:30 PM	BREAKOUT SESSIONS – Continued (Same breakouts and locations as for the 8:30 – 10:30 AM sessions)
12:30 – 1:30 PM	LUNCH (WH2 Crossover)
1:30 – 2:30 PM	NOvA Respond to Committee Questions from 1 st Day (Comitium, WH2SE)
2:30 – 6:30 PM	Executive Session and Report Writing (Comitium, WH2SE) Breaks taken as necessary.

Thursday, Feb. 1

9:00 – 2:00 PM	Closeout Dry Run with working lunch (Comitium, WH2SE) Breaks taken as necessary.
2:00 PM	Closeout (1 West, WH1SW)

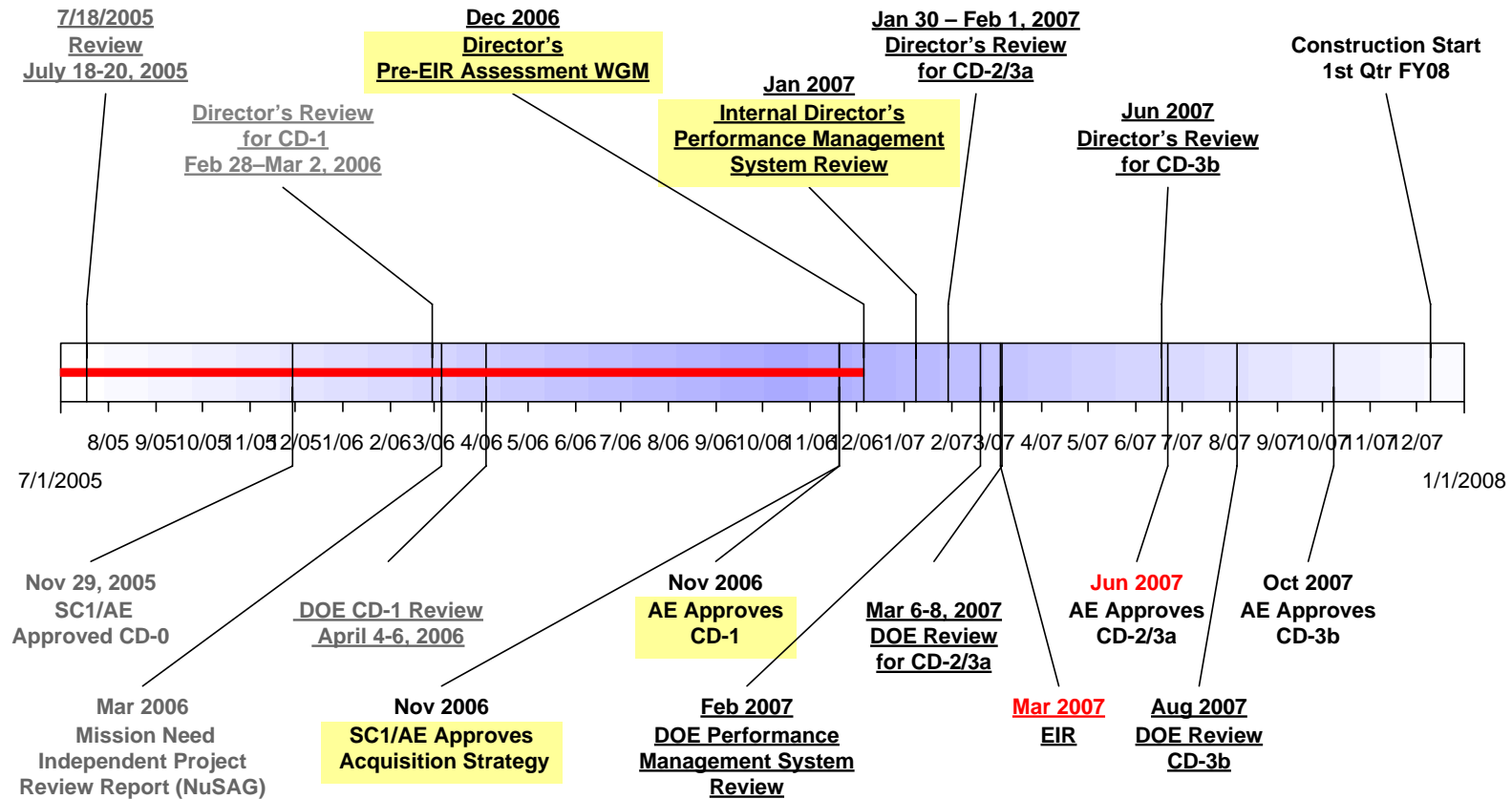
Director's Review Webpage

- http://www.fnal.gov/directorate/OPMO/Projects/NOvA/DirRev/2007/01_30/review.htm



DRAFT NOvA Project Timeline for Critical Decisions & Reviews

Updated 04-Dec-06



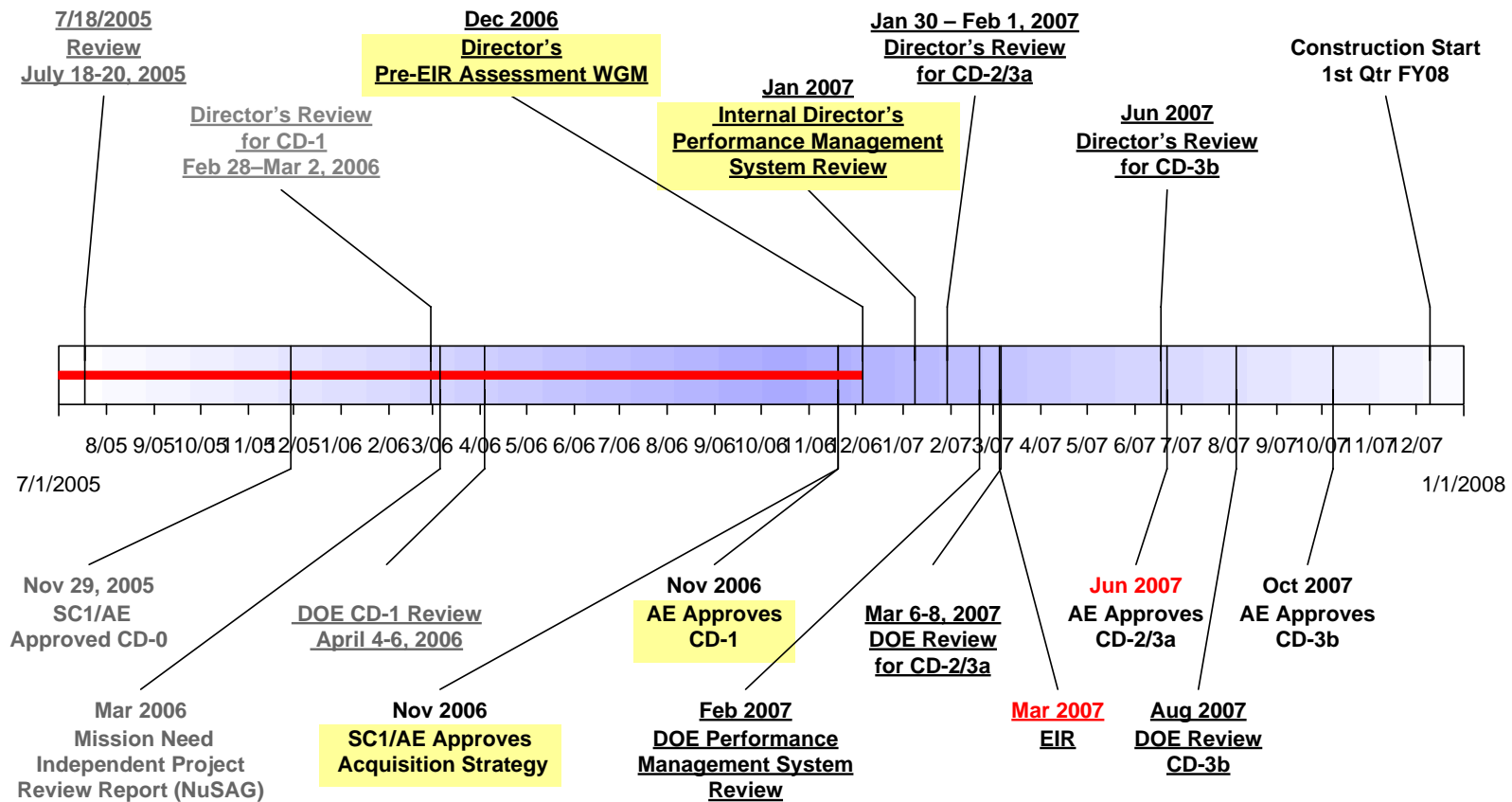
Note:

- Text in Red indicates change from prior version



DRAFT NOvA Project Timeline for Critical Decisions & Reviews

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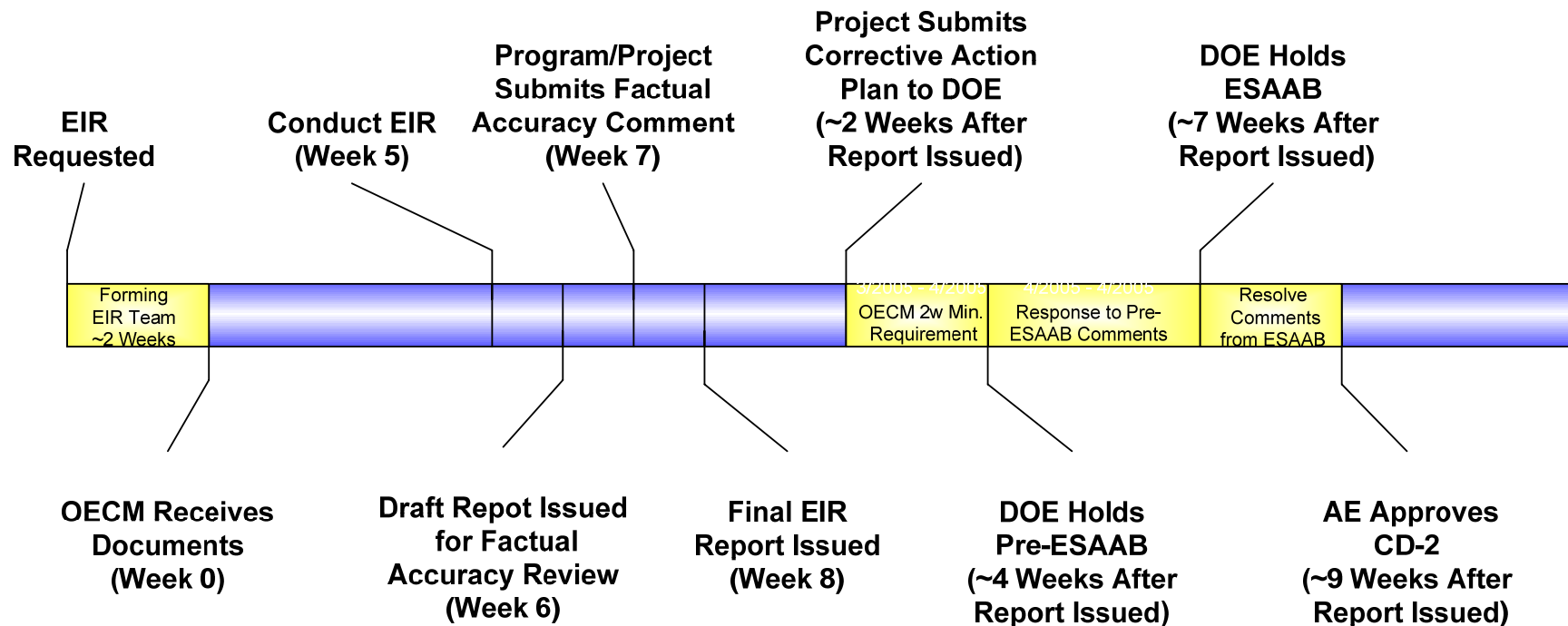
OPMO

06-Dec-06 NOvA WGM

16

EIR Process Timeline

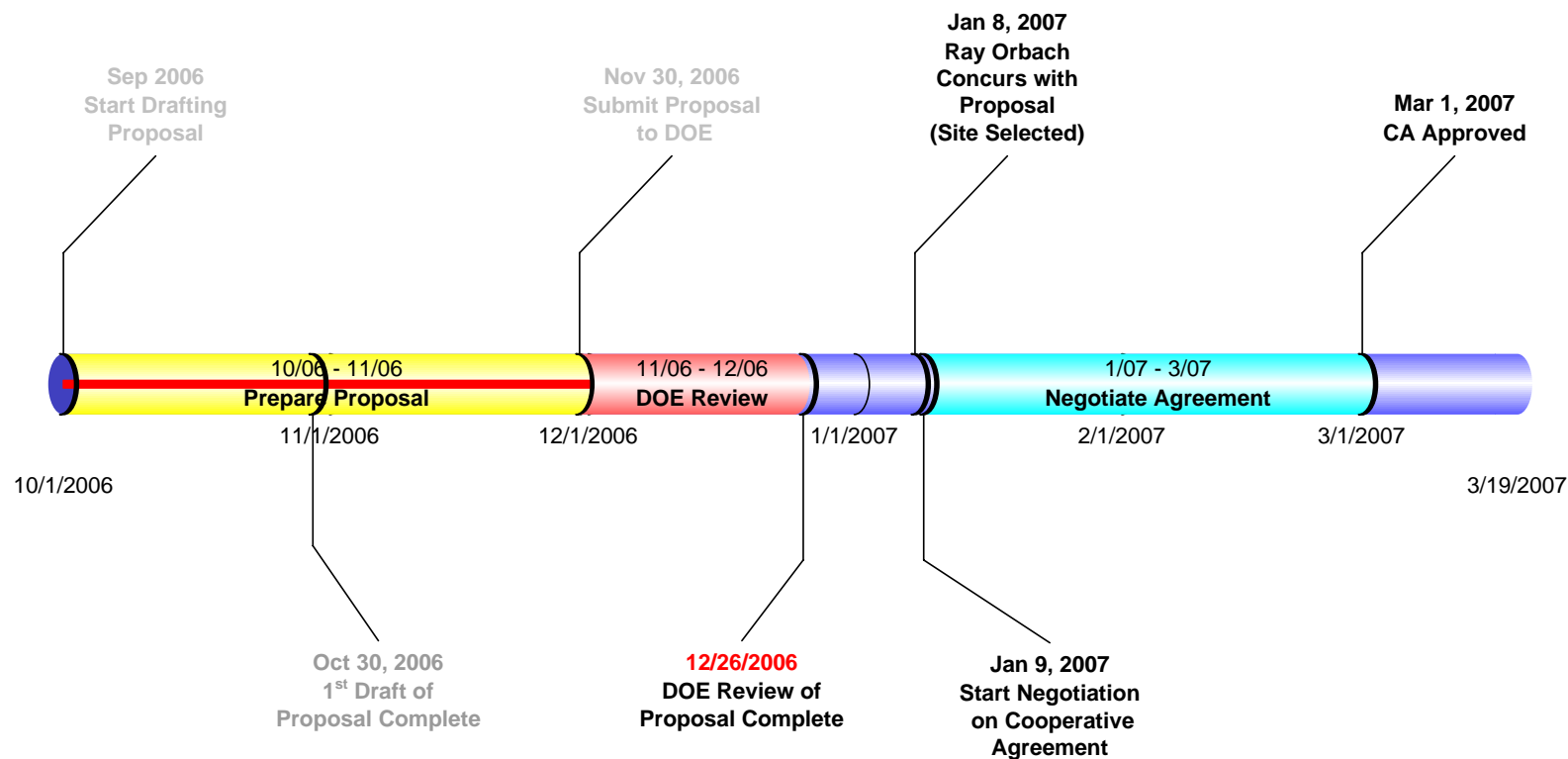
(Best Guess)





NOvA Project Proposal/Cooperative Agreement Draft Process

Updated 04-Dec-06



Note:

- Text in Red indicates change from prior version

Action Items

Rollover Items:

- a) NOvA to develop a scorecard on how the 14 contractor requirements from DOE O 413.3a Attachment 2 are met for the full NOvA project overall and how they are met, as applicable, for the Cooperative Agreement. This scorecard is to be presented at a future NOvA Working Group Meeting. John Cooper/ Ron Ray]
- b) Review NOvA's draft Performance Management System document to assess the maturity of the document in order to determine when to schedule Director's Performance Management System Review [Dean Hoffer/ Ed Temple]
- c) NOvA to document NOvA's internal procurement/approval process and present at a WGM. [John Cooper/ Ron Ray]